DIFFERENTIAL SYSTEM

PRECAUTION

1. **Before disassembling the differential assembly, thoroughly clean it by removing any sand, mud or foreign matter. This will help prevent contamination during disassembly and reassembly.**
2. **When removing the rear differential carrier cover or any other light alloy part, do not pry it off with a screwdriver or other tool that may cause damage. Instead, tap the part with a plastic-faced hammer.**
3. **Always arrange disassembled parts in the order they were removed and protect them from foreign matter.**
4. **Before installation of each part, thoroughly clean and dry it. Then apply hypoid gear oil SX to it. Do not use alkaline chemicals to clean aluminum parts, rubber parts or ring gear set bolts. Also, do not use white gasoline or other cleaning oils to clean Orings, oil seals or rubber parts.**
5. **Coat any sliding surface and rotating parts with hypoid gear oil SX.**
6. **Do not directly fix a part in a vise. Place aluminum plates between the part and vise.**
7. **Be careful not to damage the contact surfaces of the case. Such damage may cause oil leakage.**
8. **Before applying sealant, remove deposited oil sealant and clean the part to be sealed using white gasoline.**
9. **After sealing parts, do not allow oil to contact the seal for at least an hour.**
10. **Do not allow scratches on a part's contact surface with an oil seal, O-ring or gasket. Scratches may lead to oil leakage.**
11. **When press-fitting an oil seal, be careful not to damage the lip of the oil seal and its outside periphery.**
12. **When replacing a bearing, replace the inner and outer races as a set.**

PROBLEM SYMPTOMS TABLE

HINT:
Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "Suspected area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Differential system

Symptom	Suspected area	See page
Noise in rear differential	1. Oil (Level low or wrong grade)	DF-3
	2. Ring gear or drive pinion (Worn or chipped)	DF-20
	3. Backlash adjustment (Defective)	DF-20
	4. Preload adjustment (Defective)	DF-20
	5. Tooth contact between ring gear and drive pinion (Defective)	DF-34
	6. Bearing (Worn)	DF-20
Oil leak from rear differential	1. Oil (Level too high or wrong grade)	DF-3
	2. Side gear shaft oil seal (Worn or damaged)	DF-6
	3. Seal packing (Damaged)	DF-28